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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,430	06/30/2003	Wolfgang Heikamp	037141.51861US	7164
23911	7590	08/15/2005	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,430

Applicant(s)

HEIKAMP, WOLFGANG

Examiner

Minh-Chau T. Pham

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by George et al (5,507,847).

George et al teach a filter element for filtering a gas stream comprising at least one filter mat (12) positioned in the gas stream to which particles in the gas stream can adhere and be removed from the gas stream, wherein the at least one filter mat comprises a plurality of layers of a filter material (26, 28, 34) and a membrane (30, 32) disposed between the layers. The filter element (12) further comprises a pre-separator nonwoven web (26 in Fig. 4) on an inflow side of the at least one filter mat (12), a post-separator nonwoven web (34 in Fig. 4) on an outflow side of the at least one filter mat (12), and the filter mat comprising from one or more layers of an upstream or a downstream support material (col. 2, lines 55-61, col. 5, lines 5-10). George et al further teach the membrane is made of polypropylene (col. 5, lines 42-47) having porosity greater than 60% and filtration efficiency at 0.3 microns (col. 4, lines 21-62, col. 6, lines 8-19).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 7, 8, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al (5,507,847), in view of Tokar et al (5,935,284).

Claims 7, 8, 14 and 15 call for the configuration of a hollow cylinder and a filter element wound around it used for de-oiling an airstream. Tokar et al disclose the configuration of a hollow cylinder and a filter element wound around it (see details of Fig. 6 col. 5, line 64 through col. 6, line 65) used for de-oiling an airstream (Abstract, col. 4, lines 30-36). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filter element of George et al wound around a hollow cylinder as taught by Tokar et al since the multi-layered filtration structure would provide low surface energy fiber media utilized to facilitate the agglomeration and drainage of the collected oil from the gas stream.

Response to Arguments

Applicant's arguments filed on August 3, 2005 have been fully considered but they are not persuasive.

Applicant argues that none of the cited prior arts discloses "a filter mat comprises a plurality of layers of filter material and a membrane disposed between the layers". The Examiner now drops all the cited prior arts and newly introduces George et al as the primary reference in the 102 rejections of claims 1-6 and 9-13 to show a filter element for filtering a gas stream comprising at least one filter mat (12) positioned in the gas stream to which particles in the gas stream can adhere and be removed from the gas stream, wherein the at least one filter mat comprises a plurality of layers of a filter material (26, 28, 34) and a membrane (30, 32) disposed between the layers. The filter

element (12) further comprises a pre-separator nonwoven web (26 in Fig. 4) on an inflow side of the at least one filter mat (12), a post-separator nonwoven web (34 in Fig. 4) on an outflow side of the at least one filter mat (12), and the filter mat comprising from one or more layers of an upstream or a downstream support material (col. 2, lines 55-61, col. 5, lines 5-10). George et al further teach the membrane is made of polypropylene (col. 5, lines 42-47) having porosity greater than 60% and filtration efficiency at 0.3 microns (col. 4, lines 21-62, col. 6, lines 8-19), as claimed.

The Examiner also newly introduces Tokar et al as the secondary reference in combination with the primary reference George et al under 103 rejections of claims 7, 8, 14 and 15 to show the configuration of a hollow cylinder and a filter element wound around it used for de-oiling an airstream. Tokar et al disclose the configuration of a hollow cylinder and a filter element wound around it (see details of Fig. 6 col. 5, line 64 through col. 6, line 65) used for de-oiling an airstream (Abstract, col. 4, lines 30-36), as claimed. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filter element of George et al wound around a hollow cylinder as taught by Tokar et al since the multi-layered filtration structure would provide low surface energy fiber media utilized to facilitate the agglomeration and drainage of the collected oil from the gas stream.

Applicant's arguments with respect to claims 1-15 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571)

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272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Minh-Chau Pham
Patent Examiner
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August 11, 2005